UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/400,297	09/21/1999	WATARU ITO	1982-0137P	3285

7590	12/01/2003

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EXAMINER
MAHMOUDI, HASSAN

ART UNIT	PAPER NUMBER
2175	

DATE MAILED: 12/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _30 October 2003_.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-20_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-20_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All b) ☐ Some * c) ☐ None of:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.
    a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78

DOV POPOVICI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _5_ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.
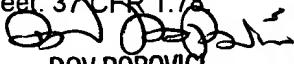
DETAILED ACTION

Remarks

1. In response to communications filed on 30-October-2003, claims 1-20 are amended

per applicant's request. Claims 1-20 are presently pending in the application.

Drawings

2. Formal drawings replacements for figures 1, 2A, 2B, and 4, received on 30-October-

2003 are approved by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iizuka

(U.S. Patent No. 5,664,030) in view of Mast (U.S. patent No. 5,881,287.)

As to claim 1, Iizuka teaches an image encrypting method (see Abstract, where

"encrypting" is read on "encoding" and "scrambling") comprising:

a first process of inputting an image by reading an image file expressing the

image (see column 2, lines 46-48);

a second process of dividing the image file into portion image data of a

predetermined unit (see column 2, lines 49-64);

a third process of generating information incidental to the portion image data (see

column 11, line 62 through column 12, line 10), the incidental information including

boundary information which expresses boundary dividing respective the portion

image data (see column 17, lines 30-65, and see column 19, lines 28-55); and

a fourth process, wherein image-handling of the portion image data is performed

on the basis of the incidental information (see column 25, line 30 through column 26,

line 52.)

Iizuka does not teach process of encrypting every portion image data to provide

every portion image data with security so that unauthorized access to the portion

image data cannot be executed without using the incidental information.

Mast teaches a method and apparatus for copy-protecting images in a computer

system (see Abstract), in which he teaches process of encrypting every portion image

data to provide every portion image data with security so that unauthorized access to

the portion image data cannot be executed without using the incidental information

(see Abstract, see column 3, lines 50-57, and see column 5, lines 26-32.)

Therefore, it would have been obvious to a person having ordinary skill in the art

at the time the invention was made to have modified Iizuka to include process of

encrypting every portion image data to provide every portion image data with security

so that unauthorized access to the portion image data cannot be executed without

using the incidental information.

It would have been obvious to a person having ordinary skill in the art at the time

the invention was made to have modified Iizuka by the teaching of Mast, because

including process of encrypting every portion image data to provide every portion

image data with security so that unauthorized access to the portion image data cannot

be executed without using the incidental information, would prevent unauthorized

user access to any/all portions of an image, as taught by Mast (see Abstract, and see

column 5, lines 26-32.)

As to claim 2, Iizuka as modified teaches the method further comprising:

a fifth process of generating an encrypted image file from encrypted portion

image data generated in the fourth process (see Mast, column 7, lines 21-26) and the

incidental information generated in the third process (see Iizuka, column 25, lines 63-

67, where "portion" is read on "positional relationship".)

As to claims 3, 8, 13, and 18, Iizuka as modified teaches wherein the encrypted

image file (see Mast, column 7, lines 21-26) includes a plurality of marking means

(see Iizuka, column 3, lines 38-42), each of the marking means being attached to

respective encrypted portion image data (see Iizuka, column 19, lines 20-27) so as to

identify respective boundaries between the encrypted portion image data in the

encrypted image file (see Iizuka, column 19, lines 28-35, and see Mast, column 3,

lines 42-46.)

As to claim 4, Iizuka as modified teaches wherein the incidental information is encrypted, and an encrypted image file including encrypted portion image data and encrypted incidental information is generated in the fourth process (see Iizuka, column 25, line 30 through column 26, line 52, where "encrypting" is read on "scrambling", and see Mast, column 7, lines 21-26.)

As to claims 5, 10, 15, and 20, Iizuka as modified teaches wherein the incidental information includes each position information (see Iizuka, column 25, line 62 through column 26, line 46) of respective encrypted portion image data (see Mast, column 7, lines 21-26) in the encrypted image file and each size information of respective the encrypted portion image data (see Iizuka, column 3, lines 56-65.)

As to claim 6, Iizuka teaches an image encrypting device (see Abstract, where "encrypting" is read on "encoding" and "scrambling"), comprising:

inputting means which inputs an image by reading an image file expressing the image (see column 2, lines 46-48);

image portion unit dividing means which divides the image file into portion image data of a predetermined unit (see column 2, lines 49-64);

encrypting means which encrypts the portion image data (see column 25, line 30 through column 26, line 52, where "encrypting" is read on "scrambling");

identifier generating means which generates information incidental to the portion image data (see column 11, line 62 through column 12, line 10), the incidental

information which expresses boundary dividing respective the portion image data (see column 17, lines 30-65, and see column 19, lines 28-55); and

file generating means which generates an image file on the basis of the portion image data encrypted by the encrypting means and the incidental information generated by the identifier generating means, wherein image-handling of the portion image data is performed on the basis of the incidental information (see column 25, line 30 through column 26, line 52.)

Iizuka does not teach encrypting to prevent unauthorized access to the portion image data.

Mast teaches a method and apparatus for copy-protecting images in a computer system (see Abstract), in which he teaches encrypting to prevent unauthorized access to the portion image data (see Abstract, see column 3, lines 50-57, and see column 5, lines 26-32.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Iizuka to include encrypting to prevent unauthorized access to the portion image data.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Iizuka by the teaching of Mast, because including encrypting to prevent unauthorized access to the portion image data, would enhanced security to any/all portions of an image, as taught by Mast (see Abstract, and see column 5, lines 26-32.)

As to claim 7, Iizuka as modified teaches, wherein the image file generated by the generating means is an encrypted image file (see Iizuka, column 25, lines 30-62, where "encrypted" is read on "scrambled", and see Mast, column 7, lines 21-26.)

As to claim 9, Iizuka as modified teaches wherein the encrypting means encrypts the incidental information, and the file generating means generates the image file on the basis of the portion image data encrypted by the encrypting means and the incidental information encrypted by the encrypting means (see Iizuka, column 25, line 30 through column 26, line 52, where "encrypting" is read on "scrambling", and see Mast, column 3, lines 50-57, and see column 5, lines 26-32.)

As to claim 11, Iizuka teaches a recording medium (see Abstract) on which are recorded image encrypting procedures (see column 2, lines 37-45. For the remaining steps of this claim, the applicant is directed to discussions and remarks made in claims 1 and 6 above.)

As to claims 12 and 17, Iizuka as modified teaches generating an encrypted image file (see Mast, column 7, lines 21-26) from encrypted portion image data generated in the fourth process and the incidental information generated in the third step (see Iizuka, column 25, line 30 through column 26, line 52.)

As to claims 14 and 19, Iizuka as modified teaches wherein the incidental information is encrypted, and an encrypted image file including encrypted portion image data and encrypted incidental information is generated in the fourth step (see Iizuka, column 25, line 30 through column 26, line 52, where "encrypting" is read on "scrambling", and see Mast, column 3, lines 50-57, and see column 5, lines 26-32 .)

As to claim 16, Iizuka teaches a recording medium (see Abstract) on which an encrypted image file is recorded (see column 2, lines 37-45. For the remaining steps of this claim, the applicant is directed to discussions and remarks made in claims 1 and 6 above.)

Response to Arguments

5. Applicant's arguments filed on 30-October-2003 with respect to the rejected claims in view of the cited references have been fully considered but they are moot in view of the new grounds for rejection.

Conclusion

6. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dov Popovici, can be reached at (703) 305-3830.

tm

November 18, 2003

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